UTAH OIL AND GAS CONSERVATION COMMISSION	
REMARKS: WELL LOGELECTRIC LOGSFILE _XWATER SANDSLOCATION INSPECTEDOTL,SUB. REPORT/abd.	
DATE FILED 12-17-82	
LAND: FEE & PATENTED STATE LEASE NO. PUBLIC LEASE NO. U-13905 INDIAN	
DRILLING APPROVED: 12-17-82	
SPUDDED IN:	
COMPLETED: PUT TO PRODUCING:	
INITIAL PRODUCTION:	
GRAVITY A.P.I.	
GOR:	
PRODUCING ZONES:	•
TOTAL DEPTH:	
WELL ELEVATION: 5272' GR 1-22-80	
DATE ABANDONED: 2-8-4 LA well never drilled	
FIELD: WILDCAT MONUMENT BUTTE 3/86	
UNIT:	
COUNTY: DUCHESUE	
WELL NO. NGC FED #23-22-H API NO. 43-013-30730	
LOCATION $2103$ FT. FROM $M$ (S) LINE, $1829$ FT. FROM $M$ (W) LINE. NE SW $1/4 - 1/4$ SEC. $22$	
TWP. RGE. SEC. OPERATOR TWP. RGE. SEC. OPERATOR	
9S   17E   22   NATURAL GAS CORP OF CAL	4



## NATURAL GAS CORPORATION OF CALIFORNIA

85 South 200 East Vernal, Utah 84078 (801) 789-4573

December 8, 1982

Mr. E. W. Guynn Minerals Management Service 1745 West 1700 South, Suite 2000 Salt Lake City, UT 84104

Division of Oil, Gas & Mining 4241 State Office Building Salt Lake City, UT 84114

Re: NGC # 23-22-H Federal
NE<sup>1</sup>4 SW<sup>1</sup>4 Sec. 22, T.9S., R.17E.
Duchesne County, UT

### Gentlemen:

Natural Gas Corporation of California proposes to drill the subject well. Enclosed are the following documents:

- 1) Application for Permit to Drill
- 2) Surveyor's Plat
- 3) Ten Point Plan
- 4) 13 Point Surface Use Plan

Your early consideration and approval of this application would be appreciated. Please contact this office if you have any questions concerning this application.

Sincerely,

W.a. Ryan

Petroleum Engineer

/kh

Encls.

cc: Operations

C. T. Clark

E. R. Henry

Form approved. Budget Bureau No. 42-R1425.

(Other instructions on

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•	GEOLOG	ICAL SURVE	ΞY	RECE	IVED	424	<del>U-17036</del>	W-	4943	/
APPLICATION FO	OR PERMIT TO	O DRILL, D	DEEPE	N, OR P	LUG B	4CK	6. IF INDIAN, A	LLOTTEE	OR TRIBE NA	ME
a. TYPE OF WORK				UEU	2 1307					
DRILL DRILL		DEEPEN [	] .	SALT LAKE	UG BAC	K' □	7. UNIT AGREE	MENT NA	ME	
OIL V GAS	OTHER			NGLE	MULTIPL ZONE	E	E. FARM OR LE	ASE NAM	E	<del></del>
WELL X WELL C. NAME OF OPERATOR	UTHER						Federal			
Natural Gas Co	rnoration of	California	1				9. WELL NO.			
3. ADDRESS OF OPERATOR	i por a cron or	carriornic	<u> </u>				NGC #23	-22 <b>-</b> I		
85 South 200 E	ast. Vernal.	Iltah 8407	78			,	10. FIELD AND			
1. LOCATION OF WELL (Report At surface 1980   FSL,	location clearly and i	n accordance wit	h any S	tate requireme	nts.*)	-	Pleasan	t Vall	ley	
At surface 1980' FSL,	1980, PMF (V	ILY SW4)					11. SEC., T., R., AND SURVE	M., OR BI	LK.	
Section 22 At proposed prod. zone	, T.9S., R.18	SE.								
At proposed frod. 2020							Section	22 <b>,</b> T.	.9S., R	. 18E
4. DISTANCE IN MILES AND D	IRECTION FROM NEAR	EST TOWN OR POS	r office	C*			12. COUNTY OR	PARISH	13. STATE	
Approximately	17 miles sout	heast of N	1yton	, Utah			Uintah		Utah	
15. DISTANCE FROM PROPOSED* LOCATION TO NEAREST	<del></del>	·		OF ACRES IN	LEASE		OF ACRES ASSIGN	ED		
PROPERTY OR LEASE LINE, F (Also to nearest drig. unit		980'	1	.920		40				
19 DISTANCE FROM PROPOSED	LOCATION*		19. PR	OPOSED DEPTH		20. ROTA	RY OR CABLE TO	ols :		
TO NEAREST WELL, DRILLING OR APPLIED FOR, ON THIS LEA	NG, COMPLETED, SE, FT.		5	650'			Rotary	-		
21. ELEVATIONS (Show whether	DF, RT, GR, etc.)						22. APPROX.	DATE WOR	K WILL ST	ART*
5042' GR							Janua	ry 15.	1983	
23.	PI	ROPOSED CASI	NG AND	CEMENTIN	G PROGRA	M				
SIZE OF HOLE	SIZE OF CASING	WEIGHT PER F	OOT	SETTING I	DEPTH		QUANTITY	OF CEMEN	T .	
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7-7/8"	5-1/2"	17		5650	!	As_r	required t	o prot	tect th	ıe_oi
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See the attached s	heets.						· · · · · · · · · · · · · · · · · · ·		• • •	

IN ABOVE SPACE DESCRIBE PROPOSED PROGRAM: If proposal is to deepen or plug back, give data on present productive zone and proposed new productive zone. If proposal is to drill or deepen directionally, give pertinent data on subsurface locations and measured and true vertical depths. Give blowout preventer program, if any. 24. TITLE Associate Engineer APPROVAL DATE PERMIT NO. FOR E. W. GUYNN 1983 FEB 9 DISTRICT OIL & GAS SUPERVISOR

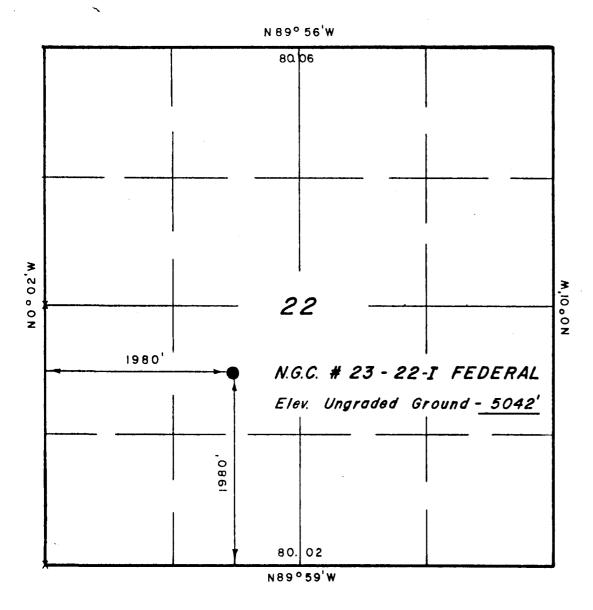
NOTICE OF APPROVAL

MMS; Div. OG & M; Operations; Conditions OF APPROVAL ATTACHED GAS IS SUBJECT TO NTL 4-A
TO OPERATOR'S COPY

FLAMING ON VENTIONS OF APPROVAL ATTACHED GAS IS SUBJECT TO NTL 4-A
TO OPERATOR'S COPY

DATED 1/1/80 Hate 0 \$6

### T 9 S, R 18 E, S.L.B.&M.



X = Section Corners Located

### PROJECT

### NATURAL GAS CORP. OF CALIF.

Well location, N.G.C. #23-22-1 FEDERAL, located as shown in the NE 1/4 SW 1/4 Section 22, T9S,R18E, S.L.B.&M. Uintah County, Utah.



THIS IS TO CERTIFY THAT THE ABOVE PLAT WAS PREPARED FROM FIELD, NOTES OF ACTUAL SURVEYS MADE BY ME OR UNDER MY SUPERVISION AND THAT THE SAME ARE TRUE AND CORRECT TO THE BEST OF MY KNOWLEDGE AND BELIEF.

REGISTERED LAND SURVEYOR REGISTRATION Nº 3137

UINTAH ENGINEERING & LAND SURVEYING
PO. BOX Q — 85 SOUTH - 200 EAST
VERNAL, UTAH - 84078

ELINAL, OTAL - 64016					
SCALE  " = 1000'	DATE 11/5 / 82				
PARTY D.K. B.K.	S.B. REFERENCES G L O Plat				
WEATHER Cool	FILE NATURAL GAS CORP.				



### United States Department of the Interior

Conservation Division 2000 Administration Building 1745 West 1700 South Salt Lake City, Utah 84104

February 2, 1981

General Outline for the Protection and Isolation of Ground Water and Oil Shale in the Uinta Basin.

The oil shale occurs with varying thicknesses in most parts of the Uinta Basin and at varying depths. Ground water also occurs at varied depths above and below the Oil Shale. These ground waters have varying degrees of salinity. Nonetheless, drilling for hydrocarbon in the Uinta Basin should provide for the protection of the oil shale and the ground water if either is present.

The protection of the oil shale and the ground water can effectively be carried on through the design of an adequate casing and cementing program for each well drilled in the area.

In the Uinta Basin, water occurs mainly in the Uinta and the Green River formations. As drilling for hydrocarbon gets deeper into the crust of the earth, more ground water might be encountered and will be protected as it is encountered.

This notice's purpose is to attempt to lay the groundwork for a casing program and cementing program that will protect the oil shale and the ground water if present.

These programs are to be considered as guidelines. The specificity of casing depth, amount of cement and the depth of staging collars will be considered on an individual basis after a careful study of the logs of each individual well. Cementing from the bottom up is an economical solution if carefully conducted.

The casing and cementing program presented here as an example, will assume that fresh water was encountered in the upper parts of the Green River, that the oil shale occurs in the middle of the Green River (1000 foot section) and that some ground water is encountered in the lower parts of the Green River.

In this case, three areas will have to be cemented to assure the integrity of the ground water and oil shale. These areas are above the upper fresh water, across the oil shale and below the lower water aquifer. Deep aquifers that do not contain useful water are cemented to prevent water zone influence on production.

The following casing and cementing program will be appropriate for this example:

A. Surface casing is set at approximately 300 feet and cemented to the surface.

- B. The next casing string will be set at approximately 300 feet below the lowest aquifer. Cementing will be done in three stages, using two stage collars and cement baskets or equivalent as described below and on attached sketches:
  - 1. Cement first stage through the casing shoe to fill annulus back to base of lower aquifer.
  - 2. Place 1st stage collar (with cement basket immediately below) at a selected point at the base of the oil shale. Cement will have to reach top of oil shale.
  - 3. Place 2nd stage collar (with cement basket immediately below) 50 feet above the top of the Bird's Nest aquifer and cement to at least 300 feet above the stage collar.
- C. The above is an example. Reasonable equivalents that accomplish these same protective measures, (such as cementing the water zones instead of isolating them), depending on the individual cases will be considered for approval.
- D. When the above mentioned well is to be abandoned, inner-casing plugs will have to be placed at the same depth as the above mentioned annulus cement jobs.

The use of cement bond logs will verify the authenticity of the cement job performed.

E. The Operator of such well should notify U.S.G.S. 48 hours prior to commencement of casing and cementing activity, so a technician could be dispatched to witness the operations to verify compliance with casing and cementing program.

### Attached Sketches:

- 1. Schematic of the required casing and cementing program.
- 2. Cross section of the Uinta Basin.
- 3. Schematic of the general ground water protection program.

E. W. Guynn District Oil and Gas Supervisor

AMR/kr

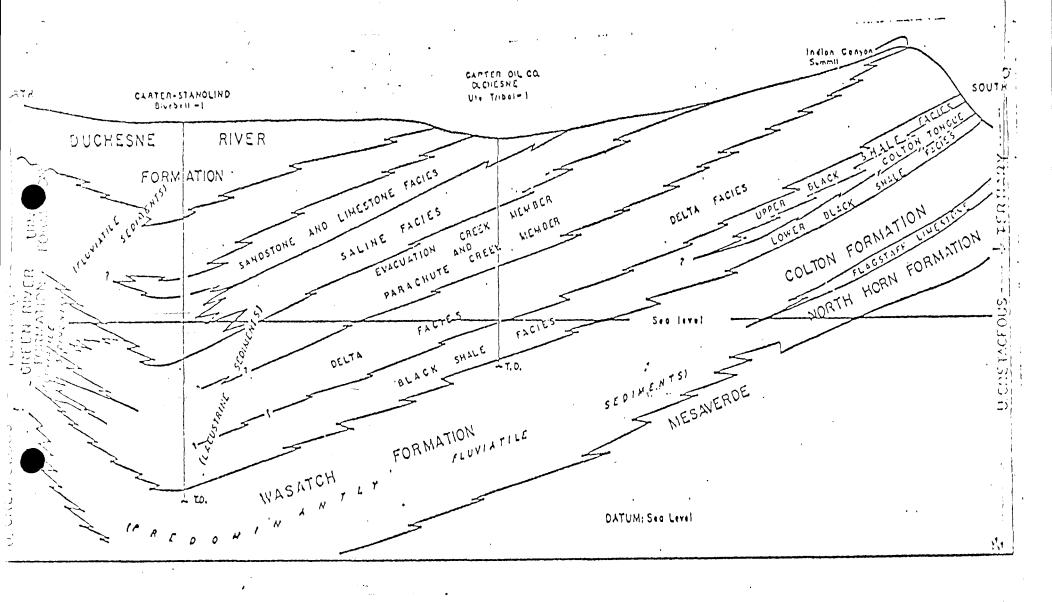


Figure 5.- View cast of cross section of Uinta Basin showing stratigraphy and intertonguing of Tertiary rocks. Ute Tribal-1 (in section) is located \_\_\_\_\_about\_8 miles southeast of the application area.

PARTIAL CASING & CEMENTING PROGRAM FOR WELLS IN NATURAL BUTTES FIELD. WINTAH COUNTY, UTAH

NO SCALE Uinta formation CEMENT BASKET IS PLACED 50' ABOVE TOP AGUIFER CEMENT TO RISE AT LEAST 300' IN ANNULUS BIRDS NEST AQUIFER HORSEBENCH SANDSTONE GREEN RIVER STAGE COLLAR OIL SHALE ZONE CEMENT BASKET CEMENT BASKET IS SET AT CONSOLIDATED SECTION AT THE BASE OF THE OIL SHALE ZONE CEMENT TO REACH THE TOP DOUGLAS CREEK OF THE MAHOGANY ZONE AQUIFER LIHESTONE & SANDSTONE CEMENT WILL REACH BASE OF LOWER AQUIFER

Form approved. Budget Bureau No. 42-R1425.

# UNITED STATES

DEPARTMENT OF THE INTERIOR 5. LEASE DESIGNATION AND SERIAL NO. U-13905 GEOLOGICAL SURVEY 6. IF INDIAN, ALLOTTEE OR TRIBE NAME APPLICATION FOR PERMIT TO DRILL, DEEPEN, OR PLUG BACK 7. UNIT AGREEMENT NAME PLUG BACK SALT LAKE CITY, UTA 1a. TYPE OF WORK DEEPEN DRILL X MULTIPLE ZONE 8, FARM OR LEASE NAME SINGLE ZONE b. TYPE OF WELL Federal OTHER WELL X 9. WELL NO. NGC 23-22-H 2. NAME OF OPERATOR Natural Gas Corporation of California 10. FIELD AND POOL, OR WILDCAT 85 South 200 East, Vernal, UT 84078

4. LOCATION OF WELL (Report location clearly and in accordance with any State requirements.\*)

At surface Pleasant Valley 11. SEC., T., R., M., OR BLE. 1829' FWL, 2103' FSL, Section 22, T.9S., R.17E. (NE4SW4) Sec. 22, 1.95. R.17E. 12. COUNTY OR PARISH | 13, STATE 14. DISTANCE IN MILES AND DIRECTION FROM NEAREST TOWN OR POST OFFICE\* ੋਕ litah Duchesne 17. NO. OF ACRES ASSIGNED TO THIS WELL 16. NO. OF ACRES IN LEASE 15. DISTANCE FROM PROPOSED\*
LOCATION TO NEAREST
PROPERTY OR LEASE LINE, FT.
(Also to nearest drlg. unit line, if any) 2440 20. ROTARY OR CABLE TOOLS & 19. PROPOSED DEPTH 18. DISTANCE FROM PROPOSED LOCATION\*
TO NEAREST WELL, DRILLING, COMPLETED,
OR APPLIED FOR, ON THIS LEASE, FT. Rotary 5 5800' 22. APPROX. DATE WORK WILL START\* 21. ELEVATIONS (Show whether DF, RT, GR, etc.) 1983 ≍ March 1; 5272' GR PROPOSED CASING AND CEMENTING PROGRAM Ξ  $\overline{23}$ . QUANTITY OF CEMENT SETTING DEPTH WEIGHT PER FOOT 월 5분 # E- E SIZE OF CASING To surface 300' SIZE OF HOLE required to protect the oil 36# 9-5/8" 12-1/4" TD shale and producing zones... 17# 5-1/2" 7-7/8"

See attached sheets for additional details.

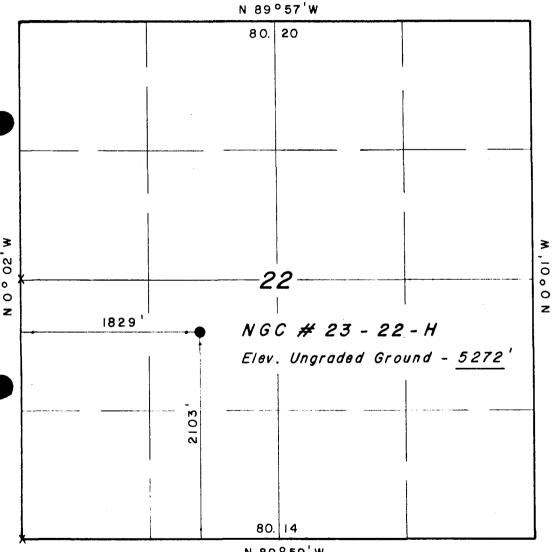
IN ABOVE SPACE DESCRIBE PROPOSED PROGRAM: If proposal is to deepen or plug back, give data on present productive zone and proposed new productive zone. If proposal is to drill or deepen directionally, give pertinent data on subsurface locations and measured and true vertical depths.

preventer program, if any.		= = = = = = = = = = = = = = = = = = =
24.	Petroleum Engineer	November 22, 1982
(This space for Federal or State office use)		oneard one of the formal of t
	E. W. Guynn  FITTLE District Oil & Gas Supervisor	12 27 25 11 MAR 3 1883
ARROWED BY	District Oil & Gas Supervisor	DATE COLUMN COLU
CONDITIONS OF PROVALENT:	5011	FLARING OR VENTING

NOTICE OF APPHOVAL cc: MMS; Div. of OG&M; Operations; CTCLark; ERHenry

FLARING OR VENTING OF GAS IS SUBJECT TO NTL 4-**DATED 1/1/80** 

### T 9 S , R /7 E , S.L.B.& M.



N 89°59'W

X = Section Corners Located

### PROJECT

### NATURAL GAS CORP. OK.

Well location , NGC # 23 located as shown in the NE 1/4. Section 22, T 9 S, R 17 E, S. 8 M. Duchesne County, Utah.

#### CERTIFICATE

THIS IS TO CERTIFY THAT THE ABOVE PLAT WAS PREPARED FROM NOTES OF ACTUAL SURVEYS MADE BY ME OR UNDER MY SUPERVISION AND THAT THE SAME ARE TRUE AND CORRECT TO THE BEST OF MY KNOWLEDGE AND BELIEF!

> REGISTERED LAND SURVEYOR REGISTRATION Nº 3137 STATE OF UTAH

UINTAH ENGINEERING & LAND SURVEYING P.O. BOX Q - 85 SOUTH - 200 EAST VERNAL. UTAH - 84078

SCALE	1 " = 1000'	DATE 10/12/82
PARTY	RK JF LZ	REFERENCES GLO Plat
WEATHER	Clear / Cool	FILE NATURAL GAS

# SUBMIT IN TRIF (Other instructions on reverse side)

BMIT IN TRIP

Other instructions on

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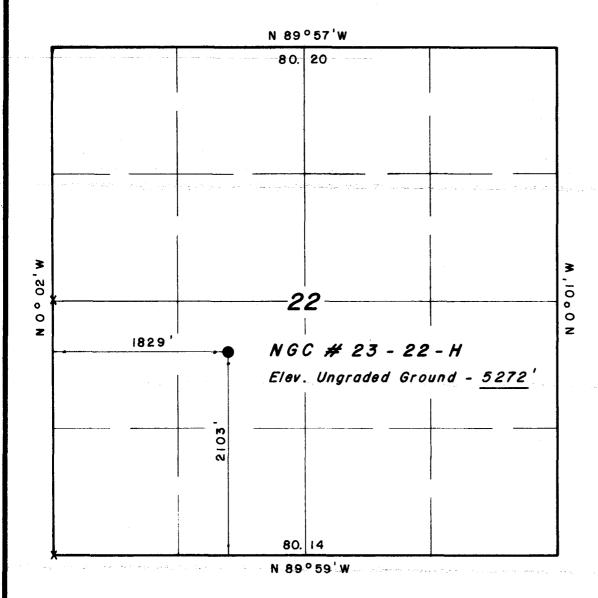
Form approved. Budget Bureau No. 42-R1425.

5. LEASE DESIGNATION AND SERIAL NO.

## UNITED STATES DEPARTMENT OF THE INTERIOR

GEOLOGICAL SURVEY				U-13905		
APPLICATION	FOR PERMIT T	O DRILL, I	DEEPE	N, OR PLUG B	ACK	6. IF INDIAN, ALLOTTEE OR TRIBE NAME
la. TYPE OF WORK	L 🛛	DEEPEN		PLUG BAC		7. UNIT AGREEMENT NAME
b. TYPE OF WELL OIL  V  GAS	s [=]			NGLE MULTIP	LE	8. FARM OR LEASE NAME
WELL NAME OF OPERATOR			20	ONE L ZONE		Federal
	orporation of C	alifor <b>ni</b> a				9. WELL NO.
3. ADDRESS OF OPERATOR	or por action or o	4111011114				NGC 23-22-H
85 South 200 4. LOCATION OF WELL (Re	East, Vernal, U	T 84078		·		10. FIELD AND POOL, OR WILDCAT
4. LOCATION OF WELL (Re	port location clearly and	in accordan <b>ce w</b> i	th any S	State requirements.*)		Pleasant Valley
	03' FSL, Sectio	n 22. T.99	R	.17F. (NF\SW\)		11. SEC., T., R., M., OR BLK. AND SURVEY OR AREA
At proposed prod. zone	;	,	. ,	(1) 40 (1)		Sec. 22, T.9S., R.17E.
14. DISTANCE IN MILES A	NO DIRECTION FROM NEAR	EST TOWN OR POS	T OFFIC	E.\$	· · · · · · · · · · · · · · · · · · ·	12. COUNTY OR PARISH   13. STATE
14. DISTANCE IN MILES A	ND DIRECTION FROM NEAR	251 10 02 100	,, 02270	-		Duchesne Utah
15. DISTANCE FROM PROPOS	SED*		16. NO	O. OF ACRES IN LEASE		OF ACRES ASSIGNED
LOCATION TO NEAREST PROPERTY OR LEASE LI	· ·		2	440	40	THIS WELL
(Also to nearest drlg. 18. DISTANCE FROM PROPO				ROPOSED DEPTH		ARY OR CABLE TOOLS
TO NEAREST WELL, DR OR APPLIED FOR, ON THIS	ILLING, COMPLETED,		5	800'	Ro	tary
21. ELEVATIONS (Show whe					·	22. APPROX. DATE WORK WILL START*
5272' GR				· ·		March 1, 1983
23.	P	ROPOSED CASI	NG AN	D CEMENTING PROGRA	AM .	
SIZE OF HOLE	SIZE OF CASING	WEIGHT PER I	TOOT	SETTING DEPTH		QUANTITY OF CEMENT
12-1/4"	9-5/8"	36#		300'		urface
7-7/8"	5-1/2"	17#		TD		equired to protect the oil
ţ.					snai	e and producing zones.
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See attached	sheets for add	litional de	etail	S.		
5. 6. 1						
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		\(\frac{1}{1}\)	LITA	AH DIVISION	OF	
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			<b>J</b>			
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zone. If proposal is to preventer program, if an	drill or deepen directions	ally, give pertine	nt data	on subsurface locations a	nd measur	red and true vertical depths. Give blowout
24.	)					
1.416	em 1641	_	rm: E	Petroleum Engir	neer	November 22, 1982
SIGNED W. A. Ry	yan / Ď	T	ITLE			
(This space for Fede	ral or State office use)			•		
PERMIT NO.				APPROVAL DATE		
PERMIT AU.						
APPROVED BY		Т	ITLE			DATE
CONDITIONS OF APPROV	AL, IF ANY:					

### T 9 S , R 17 E , S.L.B. & M.



X = Section Corners Located

#### PROJECT

### NATURAL GAS CORP. OF CALIF.

Well location, NGC # 23 - 22 - H, located as shown in the NE 1/4 SW 1/4 Section 22, T 9 S, R 17 E, S.L.B. a M. Duchesne County, Utah.

#### CERTIFICATE

THIS IS TO CERTIFY THAT THE ABOVE PLAT WAS PREPARED FROM
FIELD NOTES OF ACTUAL SURVEYS MADE BY ME OR UNDER MY
SUPERVISION AND THAT THE SAME ARE TRUE AND CORRECT TO THE
BEST OF MY KNOWLEDGE AND BELIEF

REGISTERED LAND SURVEYOR REGISTRATION Nº 3137

# UINTAH ENGINEERING & LAND SURVEYING P.O. BOX Q — 85 SOUTH - 200 EAST VERNAL, UTAH - 84078

SCALE	1 " = 1000'	DATE 10/12/82
PARTY	RK JF LZ	REFERENCES GLO Plat
WEATHER	Clear / Cool	FILE NATURAL GAS

# Ten Point Plan NGC #23-22-H Federal NE½ SW¼ Section 22, T.9S., R.17E.

1. Surface Formation: Uintah

### 2. Estimated Formation Tops and Datum:

Formation	<u>Depth</u>	Datum
Uintah Green River Oil Shale Facies Delta Facies Green Shale Marker Black Shale Facies Green River Lime Wasatch T.D.	Surface 1166' 1886' 2829' 3830' 4969' 5424' 5605' 5800'	5286' KB 4120' 3400' 2457' 1456' 317' - 138' - 319' - 514'

- 3. Producing Formation Depth: Green River and Wasatch formations.
- 4. Proposed Casing Program:

<u>Hole Size</u>	Casing Size	Weight/Ft.	Setting Depth	Casing New/Used
12-1/4	9-5/8	36	300	New
7-7/8	5-1/2	17	T.D.	New

5. BOP and Pressure Containment Data: A 3000 WP BOP system as described in the BOP and Pressure Containment Data (attached) will be installed and maintained from the 9-5/8" surface casing. BOP system including the casing will be pressure tested to a minimum of 3000 psi for 30 mins. prior to drilling and will be mechanically checked daily during drilling operations.

### 6. Mud Program:

Interval	Mud Weight lbs./gal.	Viscosity Sec./Qt.	Fluid Loss ML/30 mins.	Mud Type
0-5300	Clear Water		No Control	Water/Gel
5300-TD	8.8	40	10cc/less	L.S.N.D.

7. Auxiliary Equipment: Upper Kelly cock, full opening stabbing valve, 2½" choke manifold and pit level indicator.

8. Testing, Coring, Sampling and Logging:

a. Testing: none.

b. Coring: Possible side wall core.

c. Sampling: none.

d. Logging:

Type
DIL w/GR & SP
FDC/CNL w/GR & CAL
and "F" Log Overlay

\* Prox-Micro Log w/GR

and CAL

\* Logged between interval selected by wellsite geologist.

Note: If production casing is set, two to four zones will be perforated. Each zone will be fracture treated with approximately 30,000 gallons of gelled water and 60,000# sand.

- 9. Abnormalities (including sour gas): No abnormal pressures, temperatures, or other hazards are anticipated.
- 10. Drilling Schedule: Drilling should start approximately March 1, 1983 and last 15 days.

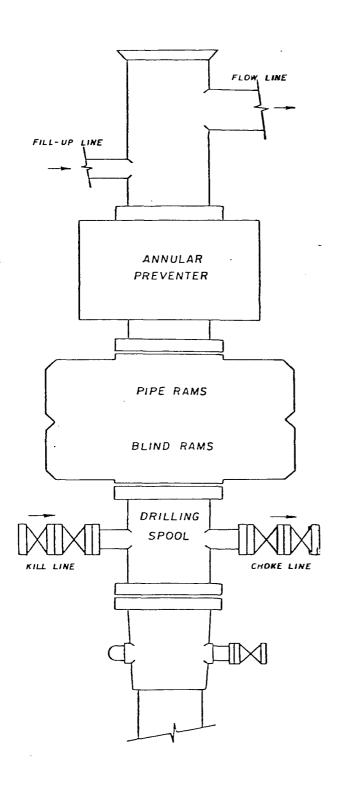
# NATURAL GAS CORPORATION OF

CALIFORNIA

BOP AND PRESSURE CONTAINMENT DATA

NGC 23-22-H

Section 22, T.9S., R.17E.



- BOP equip shall consist of a double gate, hydraulically operated preventer with pipe & blind rams or two single ram type preventers, one equipped w/pipe rams, the other w/blind rams.
- BOP's are to be well braced w/ hand controls extended clear of substructure.
- 3. Accumulator to provide closing pressure in excess of that required w/sufficient volume to operate all components.
- 4. Auxiliary equipment: Lower kelly cock, full opening stabbing valve, 2½" choke manifold, pit level indicator &/or flow sensors w/alarms.
- 5. All BOP equipment, auxiliary equipment stand pipe & valves & rotary hose to be tested to the rate pressure of the BOP's at time of installation & every 30 days thereafter. BOP's to be mechanically checked daily.
- Modification of hook-up or testing procedure must be approved in writing on tour reports by wellsite representative.

### 13 Point Surface Use Plan

### 1. EXISTING ROADS

See attached topographic map A.

To reach NGC Well #23-22-H, proceed west from Myton, Utah along U.S. Highway 40 for 1.5 miles to its junction with Highway 53. Proceed south on Highway 53 for 2 miles to its junction with County Road #216. Follow County Road #216 for 10 miles. Turn southwest on the Sand Wash Road and proceed 4.2 miles and turn east on an oil field service road. Off lease right-of ways will not be required.

### 2. PLANNED ACCESS ROAD

See attached topographic map B.

There will be .6 miles of new road construction.

- 1) Width The running surface will be 18 feet and the total disturbance width including the ditches will not exceed 30 feet.
- 2) Maximum grade 3%.
- 3) Turnouts None.
- 4) Drainage designs Ditches will be constructed on each side of the road, V-shaped, I foot deep at 3:1 slopes.
- 5) Location and size of culverts, major cuts and fills None.
- 6) Surfacing materials None.
- 7) Gates, cattleguards, or fence cuts None.
- 8) The proposed road has been flagged.

### 3. LOCATION OF EXISTING WELLS

The following wells are located within a one mile radius of the location site.

- 1) Water wells None.
- 2) Abandoned wells None.
- 3) Temporarily abandoned wells None.
- 4) Disposal wells None.
- 5) Drilling wells None.
- 6) Producing wells None.
- 7) Shut-in Wells None.
- 8) Injection wells None.
- 9) Monitoring or observation wells for other resources None.

### 4. LOCATION OF EXISTING AND/OR PROPOSED FACILITIES

- A. (1) Tank batteries A tank battery will be built on the location.
  - (2) Production facilities None.
  - (3) Oil gathering lines No lines will be constructed as the oil will be hauled by trucks.
  - (4) Gas gathering lines None.
- B. (1) In the event production is established, all petroleum production facilities are to be contained within the proposed location site. In the event that production of oil from this well is established, a berm will be constructed around the tank battery large enough to contain the contents of tanks.
  - (2) Construction methods and materials Production facilities will be placed on the proposed pad. Construction materials will come from the unused portion of the pad.
  - (3) Livestock and wildlife protection The evaporation pond will be fenced on all four sides and overhead wire with flagging installed, if there is oil in the pit.
- C. The rehabilitation of disturbed areas no longer required for the production of this well will be completed by backfilling, recontouring, topsoiling and seeding.

### 5. LOCATION AND TYPE OF WATER SUPPLY

See attached topographic map A. Water will be obtained from the Upper Pleasant Valley Canal in Section 33, T.4S., R.2W., or at the Clark Roberts Ranch in Section 21, T.8S., R.17E. Agreements have been made with both in the past. The location will depend on the availability of water at the time the well is drilled.

### 6. SOURCE OF CONSTRUCTION METHODS

All construction materials for this location site and access road will be borrow materials, accumulated during construction of the location site. No additional road gravels or pit lining material from other sources are anticipated at this time, but if they are required, the appropriate actions will be taken to acquire them from private sources.

### 7. METHODS FOR HANDLING WASTE DISPOSAL

1) Cuttings, drilling fluids and produced fluids - A reserve pit will be constructed. The reserve pit will be approximately 10' deep and at least one-half of this depth shall be below the surface of the existing ground.

Natural Gas Corporation of California Well No. 23-22-H Section 22, T. 9 S., R. 17 E. Duchesne County, Utah Lease U-13905

### Supplemental Stipulations

1) Adequate and sufficient electric/radioactive logs will be run to locate and identify the prime oil shale horizons in the Mahogany Zone of the Green River formation. Casing and cementing programs will be adjusted to eliminate any potential influence of the well bore or productive hydrocarbon zones on the oil shale resource. Surface casing program may require adjustment for protection of fresh water aquifers. (See attached tentative casing and cementing program for the Uinta Basin.)

One half of the reserve pit will be used as a fresh water storage area during the drilling of this well and the other one-half will be used to store nonflammable materials such as cutting, salts, drilling fluids, chemicals, produced fluids, etc.

Prior to the onset of drilling, a "stock tight" fence shall be installed on three sides of the reserve pit. This fence will be either (1) woven wire at least 28 inches high and within four inches of ground surface with two strands of barbed wire above the woven wire with 10-inch spacing, or (2) at least five strands of barbed wire spaced, starting from the ground, at approximately 6-, 8-, 10-, 12-, and 12-inch intervals. At the completion of drilling operations, the fourth side of the reserve pit will be fenced and allowed to dry completely before the pit is backfilled. If there is oil on the pits, overhead wire and flagging will be installed on the pits.

If deemed necessary by the agencies concerned to prevent contamination to surrounding areas, the reserve pit will be lined with a gel.

- 2) Sewage A portable chemical toilet will be supplied for human waste.
- 3) Garbage Trash cages will be on all locations and all trash will be removed to an authorized landfill.
- 4) Site Clean-up Immediately after the rig is moved out, the area around the well site will be cleaned and all refuse placed in the burn pit.

### 8. ANCILLARY FACILITIES

There are no ancillary facilities planned for at the present time and none foreseen in the near future.

### 9. WELL SITE LAYOUT

See typical rig layout.

### 10. PLANS FOR RESTORATION OF THE SURFACE

Prior to construction of the location, the top six inches of soil material will be stripped and stockpiled. This will amount to approximately 1800 cubic yards of material that will be stockpiled.

If the well is producing, the platform and pit areas no longer required for the production of the well will be backfilled, recontoured, topsoiled and seeded. If the well is abandoned, the entire disturbed area (including roads) will be restored by: (1) backfilling; (2) recontouring; (3) topsoiling; (4) seeding. Specifically: the platform highwall(s) and road fill(s) will be eliminated by moving all excavated material back in place. Restoration of the location and access road will begin within 90 days after completion of the well. The BLM representative will be notified prior to starting the rehabilitation operations.

The following seed mixture and methods for seeding will be used: The seed mixture will be determined by the Bureau of Land Management at the time of abandonment.

Seed will be planted after September 1 and prior to ground frost; or seed will be planted after the frost has left and before May 15. All seed will be drilled on the contour at a depth of  $\frac{1}{4}$  to  $\frac{1}{2}$  inch. Slopes too steep or rocky for machinery will be broadcast and the seed hand raked into the soil. When broadcasting the seed, the rate per acre will be doubled.

The Lessee further convenants and agrees that all of said clean-up and restoration activities shall be done and performed in a diligent and most workmanlike manner and in strict conformity with the above mentioned Items #7 and #10.

### 11. OTHER INFORMATION

- 1) The Vernal District BLM will be contacted by the Operator or dirt contractor forty-eight hours prior to beginning any work on public land.
- 2) The dirt contractor will be furnished a copy of the approved APD and Surface Use Plan prior to beginning any work on public land.
- 3) All permanent (on-site for six (6) months duration or longer) structures constructed or installed, including the pumpjack, shall be painted a flat, non-reflective, earthtone color to match Themec 23-08351 Mesa Brown Enduratone or an approved equal. All facilities shall be painted within six months of when the production facilities are put in place. Facilities that are required to comply with O.S.H.A. (Occupational Safety and Health Act) are excluded.
- 4) Construction and maintenance of roads, rehabilitation of disturbed areas, and construction of pipeline routes shall be in accordance with the surface use standards as set forth in the booklet, "Surface Operating Standards for Oil and Gas Exploration and Development".

### 12. LESSEE'S OR OPERATOR'S REPRESENTATIVE

Natural Gas Corporation of California 85 South 200 East Vernal, UT 84078 Attn: Bill Ryan or Rick Canterbury

Telephone: (801) 789-4573

### 13. CERTIFICATION

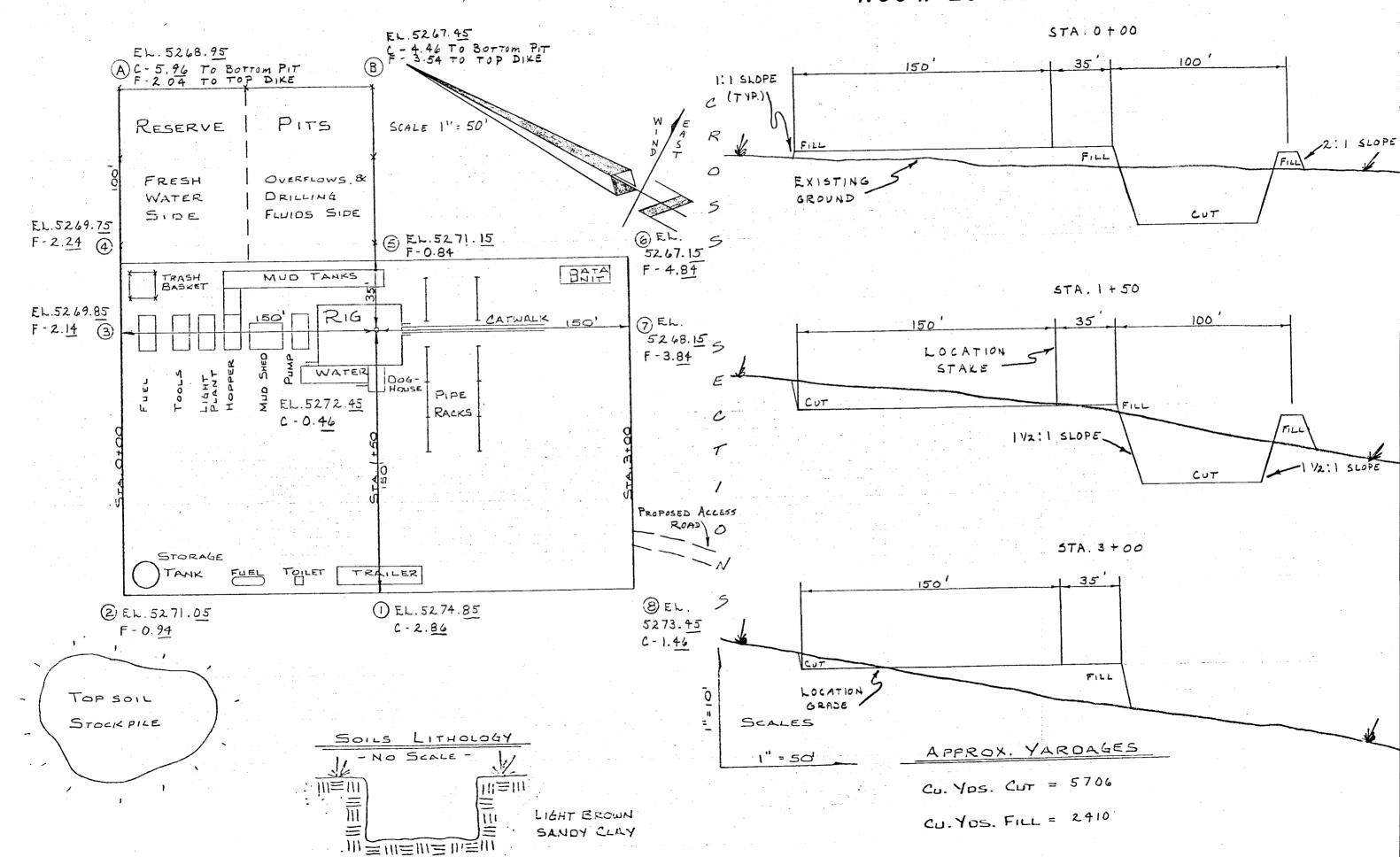
I hereby certify that I, or persons under my direct supervision, have inspected the proposed drillsite and access route; that I am familiar with the conditions which presently exist; that the statements made in this plan are, to the best of my knowledge and belief, true and correct; and that the work associated with the operations proposed herein will be performed by Natural Gas Corporation of California and its contractors in conformity with this plan and terms and conditions with this plan and the terms and conditions under which it is approved.

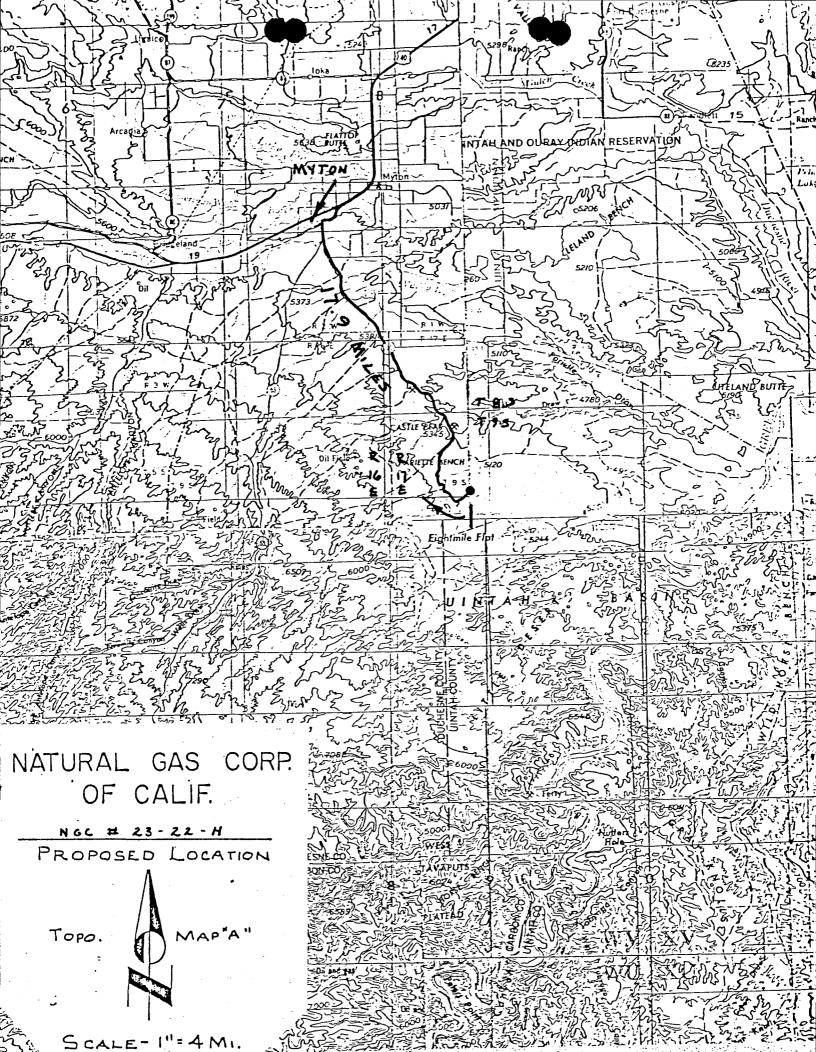
December 8, 1982

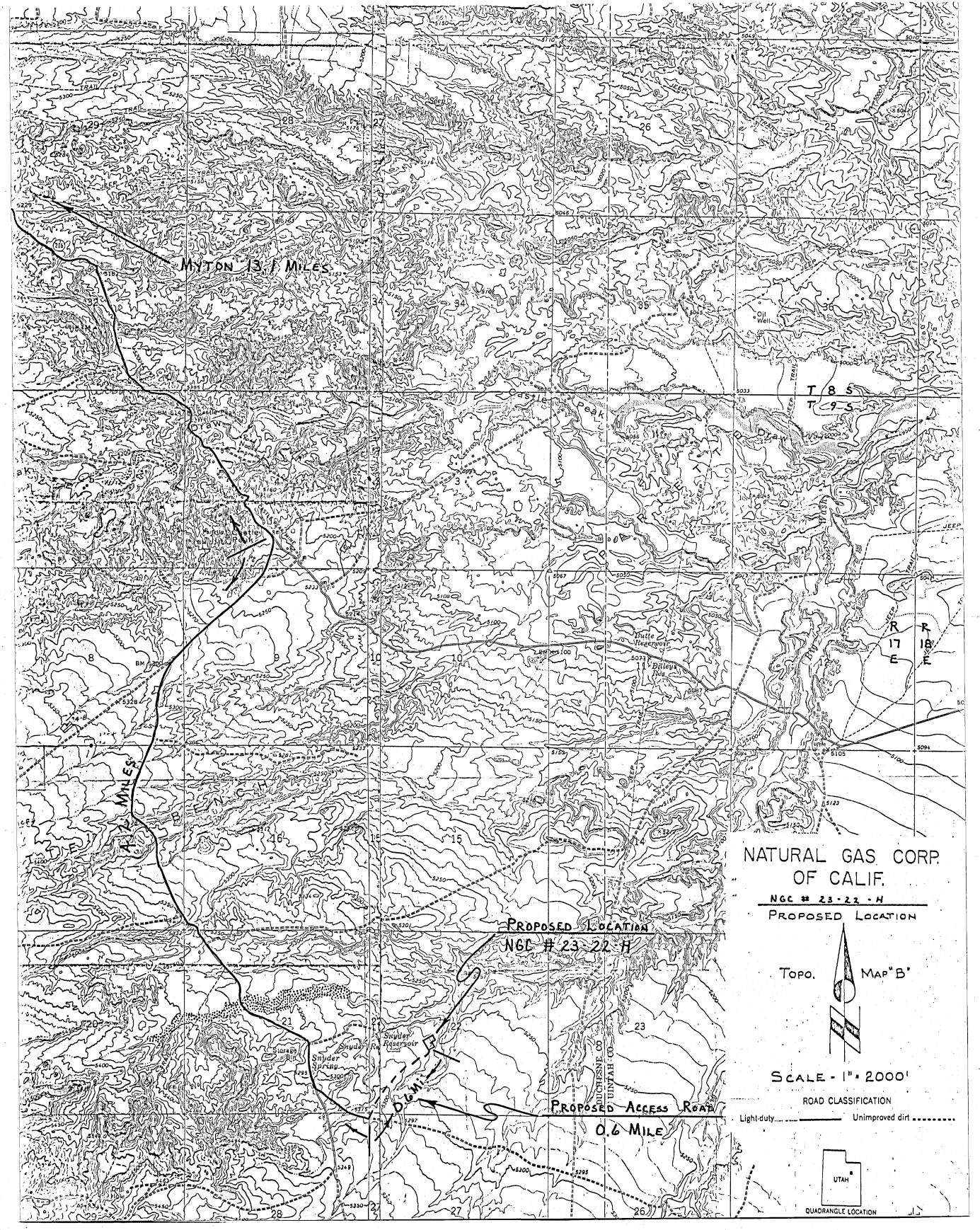
Date

W. A. Ryan, Petroleum Engineer

# NATURAL GAS CORP. OF CALIF. NGC # 23-22-H







OPERATOR NATURAL GAS CORK			DATE 12-17-82
WELL NAME NGC FED 23-2 SEC NESWZZ I 95		COUNTY D	UCHEVIE
43-013-30730 API NUMBER		TYPE (	OF LEASE
POSTING CHECK OFF:			
INDEX	HL.		
NID	PI		
J MAP			
PROCESSING COMMENTS:	43676 41	174IN 1000	/
700			
		·	
CAF /			
APPROVAL LETTER:			
SPACING: A-3 UNIT		c-3-a	CAUSE NO. & DATE
c-3-b		c-3-c	
SPECIAL LANGUAGE:			

December 17, 1982

Natural Gas Corporation of California 85 South 200 East Vernal, Utah 84078

Well No. NGC Fed. 23-22-H

NESW Sec. 22, T.9S, R.17E Duchesne County, Utah

#### Gentlemen:

Insofar as this office is concerned, approval to drill the above referred to oil well is hereby granted in accordance with Rule C-3(b), General Rules and Regulations and Rules of Practice and Procedure.

Should you determine that it will be necessary to plug and abandon this well, you are hereby requested to immediately notify the following:

RONALD J. FIRTH - Engineer

OR

CLEON B. FEIGHT - Director

Office: 533-5771 Home: 571-6068

Office: 533-5771

Home: 466-4455

Enclosed please find Form OGC-8-X, which is to be completed whether or not water sands (acquifers) are encountered during drilling. Your cooperation in completing this form will be appreciated.

Further, it is requested that this Division be notified within 24 hours after drilling operations commence, and that the drilling contractor and rig number be identified.

The API number assigned to this well is 43-013-30730.

Sincerely,

Norman C. Stout Administrative Assistant

NCS/as cc: MMS Enclosure 1.31

February 23, 1983

Mr. E. W. Guynn
District Supervisor
Minerals Management Service
1745 West 1700 South, Suite 2000
Salt Lake City, UT 84104

Division of Oil, Gas & Mining 4241 State Office Building Salt Lake City, UT 84114

Rick Conterbury

Re: NGC Well #23-22-H
NE' SW' Section 22, T.9S., R.17E.
Federal Lease U-13905
Duchesne County, UT

Dear Mr. Guynn:

Enclosed are copies of the Designation of Operator for the subject well.

::GC

NGC

Sincerely,

Rick Canterbury Associate Engineer

RC/kh

Encls.

cc: Operations
 C. T. Clark
 E. R. Henry

### DESIGNATION OF OPERATOR

The undersigned	is, on	the records	of the	Bureau of	Land	Management	holder	of le	250
_	-		_			~.~~.~~~~~~~	110101	~	

DISTRICT LAND OFFICE:

SERIAL NO .:

U-13905

and hereby designates

NAME:

Natural Gas Corporation of California

Address: 7800 E. Union Avenue, Ste. 800

Denver, Colorado 80237

as his operator and local agent, with full authority to act in his behalf in complying with the terms of the lease and regulations applicable thereto and on whom the supervisor or his representative may serve written or oral instructions in securing compliance with the Operating Regulations with respect to (describe acreage to which this designation is applicable):

Township 9 South, Range 17 East, SLM

Section 21: E12, SW14, S12NW14

Section 22: N2, SW4, N2SE4, SW4SE4

1160 acres, m/l Duchesne County, Utah

It is understood that this designation of operator does not relieve the lessee of responsibility for compliance with the terms of the lease and the Operating Regulations. It is also understood that this designation of operator does not constitute an assignment of any interest in the lease.

In case of default on the part of the designated operator, the lessee will make full and prompt compliance with all regulations, lease terms, or orders of the Secretary of the Interior or his representative.

The lessee agrees promptly to notify the supervisor of any change in the designated operator.

ATTEST:

LANCASTER OIL CORPORATION

IAN o

2 : 1983

(Date)

LANCASTER CORPORATIO

P. O. BOX 8439 DENVER, COLORADO 80201

(Address)

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U.S. CO-THESE PRINTING OFFICE : 1978 0 . 277.14

Scott M. Matheson, Governor Temple A. Reynolds, Executive Director Dr. G. A. (Jim) Shirazi, Division Director

4241 State Office Building • Salt Lake City, UT 84114 • 801-533-5771

December 22, 1983

Natural Gas Corporation of California 85 South 200 East Vernal Utah 84078

> RE: Well No. NGC# 23-22-H 2103' FSL, 1829' FWL NE SW Sec. 22, T. 9S, R. 17E Duchesne County, Utah

### Gentlemen:

Due to excessive time delay in commencing drilling operations, approval to drill the subject well is hereby rescinded effective one calendar month from the date of this notice.

A new Application for Permit to Drill must be filed with this office for approval, prior to future drilling of the subject location.

Respectfully,

Norman C. Stout

Administrative Assistant

NCS/cj